

Name: _____



New York State Testing Program

2022 Mathematics Test Session 1

Grade 5

April 26–28, 2022

RELEASED QUESTIONS

Grade 5 Mathematics Reference Sheet

CONVERSIONS

1 mile = 5,280 feet

1 mile = 1,760 yards

1 pound = 16 ounces

1 ton = 2,000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 liter = 1,000 cubic centimeters

FORMULAS

Right Rectangular Prism

$$V = Bh \text{ or } V = lwh$$

Session 1



TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before making your choice.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.

- 1** Jill has 4 one-dollar bills, 3 quarters, 4 dimes, and 3 pennies. Mark has 3 one-dollar bills, 4 dimes, and 2 pennies. What is the difference between the amount of money Jill has and the amount of money Mark has?

A \$1.01
B \$1.76
C \$7.85
D \$8.60

- 2** What is the value of $6\frac{3}{5} + 3\frac{2}{3}$?

A $2\frac{14}{15}$
B $9\frac{4}{15}$
C $9\frac{5}{8}$
D $10\frac{4}{15}$

- 3** Which two-dimensional figure is always a regular quadrilateral?

A rhombus
B polygon
C square
D trapezoid

GO ON

6

Janelle makes fruit punch by mixing the ingredients listed below.

- 5 pints of orange juice
- 6 cups of grape juice
- 8 cups of apple juice

How many quarts of fruit punch does Janelle make?

- A** 3
- B** 6
- C** 24
- D** 96

7

Shara is building a birdhouse. She cuts a 6-foot-long board into sections that are each

$\frac{1}{3}$ foot long. How many sections of the board will Shara have when she is finished cutting?

- A** 2
- B** $6\frac{1}{3}$
- C** $10\frac{1}{3}$
- D** 18

GO ON

13 Which value makes the comparison below true?

$$\underline{\quad ? \quad} < 0.6$$

- A 0.6
- B 0.7
- C 0.59
- D 0.64

14 A student completes his homework in 1 hour and 34 minutes. How long, in minutes, does it take the student to complete his homework?

- A 26
- B 60
- C 94
- D 134

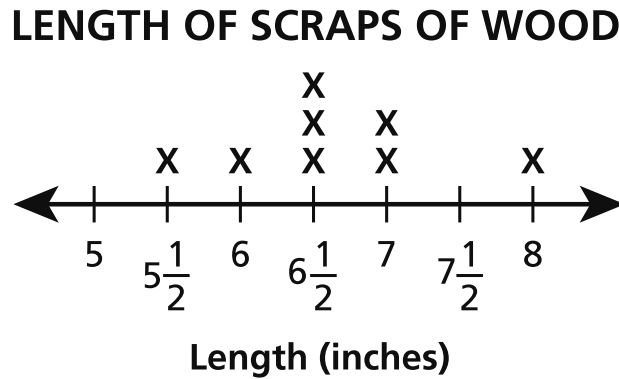
15 What is the value of the expression shown below?

$$2,158 \div 26$$

- A 80
- B 83
- C 86
- D 89

18

Ms. Torres has a box of scraps of wood. She measures the length of each scrap of wood to the nearest half inch. The results are represented on the line plot below.



What is the approximate length, in inches, of the scraps of wood when they are placed end to end?

- A $19\frac{1}{2}$
- B 33
- C $45\frac{1}{2}$
- D 53

19

Which expression is equivalent to 65×0.15 ?

- A $65 \times 0.1 + 0.05$
- B $65 \times 0.05 + 0.1$
- C $(65 \times 0.1) + (65 \times 0.5)$
- D $(65 \times 0.1) + (65 \times 0.05)$

GO ON

20

What is the value of the expression shown below?

$$14\frac{1}{3} - 6\frac{5}{8}$$

A $7\frac{1}{24}$

B $7\frac{17}{24}$

C $8\frac{7}{24}$

D $8\frac{23}{24}$

21

Trey and his 4 friends equally share a 12-ounce jar of applesauce. How much applesauce, in ounces, does each person receive?

A $\frac{5}{12}$

B $2\frac{2}{5}$

C 17

D 60

GO ON

22 What is the value of $\frac{3}{10} + \frac{27}{100}$?

- A** $\frac{30}{10}$
- B** $\frac{30}{100}$
- C** $\frac{57}{10}$
- D** $\frac{57}{100}$

23 Which statement about the quotient of $425.378 \div 10^3$ is true?

- A** The decimal point is located to the left of the 4.
- B** The decimal point is located to the right of the 8.
- C** The decimal point is located between the 3 and the 7.
- D** The decimal point is located between the 4 and the 2.

Name: _____



New York State Testing Program

2022 Mathematics Test Session 2

Grade 5

April 26–28, 2022

RELEASED QUESTIONS

Grade 5 Mathematics Reference Sheet

CONVERSIONS

1 mile = 5,280 feet

1 mile = 1,760 yards

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FORMULAS

Right Rectangular Prism

$$V = Bh \text{ or } V = lwh$$

Session 2



TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before making your choice or writing your response.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.
- Be sure to show your work when asked.

- 31** What is the missing value in the equation shown below?

$$\frac{4}{10} + \frac{?}{100} = \frac{7}{10}$$

- A** 1
- B** 3
- C** 10
- D** 30

- 32** Which expression is equivalent to $\frac{2}{3} \times 7$?

- A** $2 \times 7 \div 3$
- B** $2 \times 3 \div 7$
- C** $7 \times 3 \div 2$
- D** $7 \div 2 \times 3$

- 33** Which two-dimensional figure always has 4 equal sides and 4 right angles?

- A** parallelogram
- B** rectangle
- C** rhombus
- D** square

GO ON

34 Which expression has a value less than 1 ?

A $\frac{3}{4} \times \frac{4}{3}$

B $\frac{3}{4} \times \frac{6}{3}$

C $\frac{3}{4} \times \frac{4}{4}$

D $\frac{3}{4} \times \frac{8}{4}$

35 Which fraction has the same value as 0.28 ?

A $\frac{28}{1}$

B $\frac{28}{10}$

C $\frac{28}{100}$

D $\frac{28}{1,000}$

36 Mr. Davis buys 4 pizzas for a family dinner. He cuts each pizza into sixths. How many pieces of pizza does Mr. Davis have for the family dinner?

A 6

B 10

C 20

D 24

GO ON

- 37** Nicolas drinks $\frac{2}{3}$ liter of water in the morning and $\frac{1}{2}$ liter of water at lunch. During basketball practice, he drinks another $\frac{2}{3}$ liter of water. What is the total amount of water, in liters, that Nicolas drinks?

- A** $\frac{3}{5}$
- B** $\frac{5}{8}$
- C** $1\frac{1}{6}$
- D** $1\frac{5}{6}$

- 38** What is six hundred eighty and fourteen thousandths written in standard form?

- A** 608.014
- B** 608.14
- C** 680.014
- D** 680.14

GO ON

39

Kallie works at a pet store. Part of her job is to add the correct amount of water conditioner to each fish tank. The list below provides information about the number of fish tanks and the amount of water conditioner she uses.

- There are 12 fish tanks that need water conditioner.
- Each fish tank is filled with 20 quarts of water.
- For every 10 gallons of water, Kallie uses 1 teaspoon of water conditioner.

What is the total number of teaspoons of water conditioner Kallie will use for all the water in the 12 fish tanks?

Show your work.

Answer _____ teaspoons

GO ON

40

The perimeter of an equilateral triangle is $\frac{1}{8}$ unit. What is the length, in units, of each side of the triangle?

Show your work.

Answer _____ unit(s)

GO ON

41

In the number 714.438, how does the value of the digit 4 to the left of the decimal point compare to the value of the digit 4 to the right of the decimal point?

Explain your answer.

GO ON

42

Maddy buys 5 notebooks and 3 pens. The price of each item is listed below.

- notebook: \$2.85 each
- pen: \$1.79 each

Maddy pays for the notebooks and pens with a \$20.00 bill. How much change will Maddy receive?

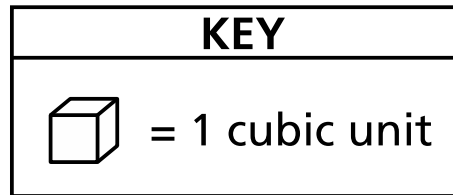
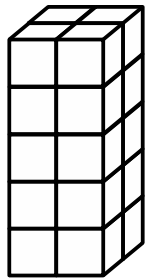
Show your work.

Answer \$ _____

GO ON

43

Colin built 4 identical towers using unit cubes. One of the towers is pictured below.



What is the total volume, in cubic units, of the 4 towers Colin built?

Show your work.

Answer _____ cubic units

GO ON

44

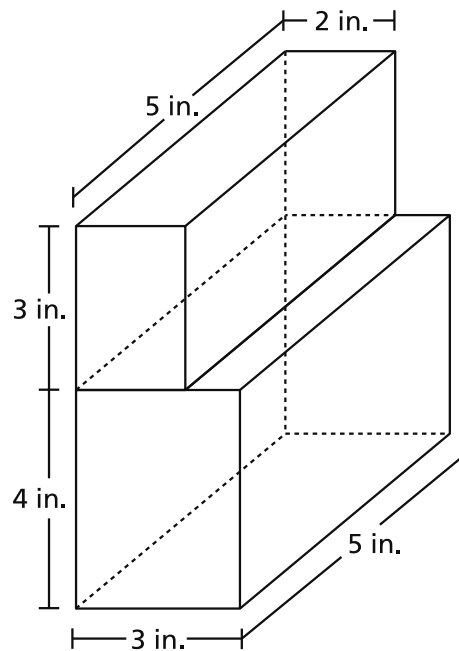
Sam has a goal of walking $3\frac{1}{2}$ miles by the end of the day. He walks $1\frac{1}{8}$ miles before lunch and $\frac{3}{4}$ mile after resting. What is the remaining distance, in miles, that Sam needs to walk to reach his goal?

Show your work.

Answer _____ miles

GO ON

A diagram of two rectangular prisms is shown below.



Explain the process for determining the combined volume of the two prisms. Be sure to include the total volume in your answer.

Answer

If the prism on top of the figure was 4 inches tall instead of 3 inches tall, what would be the difference between the volume of the original prism on top and the new prism on top?

Show your work.

Answer _____ cubic inches